

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/SG2004/000317

## A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl. 7: C01B 3/04, 3/08, 6/04, 6/06, 21/00, 21/06

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC C01B 3/04, 3/08, 6/04, 6/06, 21/00, 21/06

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
DERWENT: WPAT and JAPIO: adsorb, absorb, desorb, desorption, releas, hydrogen, metal, stor, nitrid, imid, amid, lithium aluminium, lithium calcium, magnesium aluminium, magnesium sodium, magnesium calcium

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2003/050036 A1 (NANOMIX INC) 19 June 2003 Pages 5-6, Claims 1-42	1-24
A	WO 2003/018468 A1 (TECHNOLOGICAL RESOURCES PTY LTD) 6 March 2003 Claims 1-21	1-24
A	US 2003/0129126 A1 (PING CHEN ET AL) 10 July 2003 Pages 1-2, Claims 1-31	1-24
P, A	US 6814782 B2 (BORISLAV BOGDANOVIC ET AL) 9 November 2004 Pages 1-6	1-24

Further documents are listed in the continuation of Box C

See patent family annex .

* Special categories of cited documents:		
"A" document defining the general state of the art which is not considered to be of particular relevance	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent but published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&"	document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search  
24 November 2004

Date of mailing of the international search report

20 DEC 2004

Name and mailing address of the ISA/AU

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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

**PCT/SG2004/000317**

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report	Patent Family Member				
WO 03050036					
WO 03018468	EP 1441978				
US 20030129126					
US 6814782	CA 2403403	DE 10012794		EP 1263676	
	US 2003053948	WO 0168515			

Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.

**END OF ANNEX**